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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,809	03/14/2002	Mikhail M. Lyapunov	14984.28	3092

7590

02/17/2004

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EXAMINER

RAHMJOO, MANUCHER

ART UNIT

PAPER NUMBER

2676

DATE MAILED: 02/17/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/099,809

Applicant(s)

LYAPUNOV ET AL.

Examiner

Mike Rahmjoo

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1, and 11 applicant recites "...one or more function calls...". It is not clear what function calls are and what how these function calls are made.

As per claims 1 and 11 applicant recites "...of a sub- component oriented character...". It is not clear whether "sub- component oriented" stands for characters with sub- component or without sub- component.

As per claim 3 applicant recites "...on a non- solid background...". It is not clear what non- solid background is or how backgrounds could be non- solid.

Claims 2, 4- 20 and 12- 21 are indefinite because they depend on indefinite claims.

Further clarification of the above claims and other possible claims is respectfully requested.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1- 3, 6, 8, 10- 14, 17, and 20- 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Stamm et al (US Patent 6,356,278 provided by the applicant), hereinafter, Stamm.

As per claims 1, 11 and 12 Stamm teaches an act of generating a bit-map representation of a sub-component-oriented character by using a sample to generate each pixel sub-component see for example column 13 lines 1- 5 and figure 9 and by treating each pixel sub- component as a distinct luminance intensity source see for example column 13 line 9- 11; and an act of rendering the sub-component-oriented character on the display device by making one or more function calls to the hardware graphics unit using the application program interface see for example column 13 lines 30- 35 and figures 5 and 10, and one or more computer readable media see for

example figure 2 blocks 32- 34 and blocks 29, 31, and 39.

As per claims 2 and 13 Stamm teaches an act of blending the sub-component-oriented character on a background (combining three pixel sub-components to form a single pixel on an LCD) by making one or more function calls to the hardware graphics unit see for example and column 9 lines 11- 24 and figure 4.

As per claims 3 and 14 Stamm teaches an act of blending the sub-component-oriented character on a non-solid background (different background color) image by making one or more function calls to the hardware graphics unit see for example column 13 lines 5- 20.

As per claims 6 and 17 Stamm teaches an act of scaling the sub-component-oriented character on a background by making one or more function calls to the hardware graphics unit see for example column 9 lines 56- 64.

As per claim 8 Stamm teaches the Application Program Interface is configured to treat each pixel as a single luminance intensity source, rather than treating each pixel sub-component as a single luminance intensity source (samples within the outline with the same intensity of 0%) see for example column 13 lines 21- 27.

As per claims 10 and 20 Stamm teaches an act of defining a color channel for each pixel sub-component type see for example figure 4b blocks 72- 76 as different channels of colors; and an act of separately populating a distinct color buffer for each color channel see for example column 12 lines 30- 33 for sampling and mapping at desired ratios.

As per claim 21 Stamm teaches an inter pixel interpolation of glyph data by means of graphics hardware see for example column 11 lines 18- 27.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4- 5, 7, 9, 15- 16, 18- 19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stamm in view of Taylor et al (US PUB 2002/0167523), hereinafter, Taylor.

As per claims 4 and 15 Stamm does not teach an act of blending the sub-component-oriented character on a background using a semi-transparent brush by making one or more function calls to the hardware graphics unit.

However, Taylor teaches an act of blending the sub-component-oriented character on a background using a semi-transparent brush (alpha blending of the source pixel defined by RGBA) by making one or more function calls to the hardware graphics unit see for example page 7 paragraph [0143].

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Taylor into Stamm to perform texture mapping including selecting an appropriate level of detail (LOD), rotating,

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interfacing, and blending sub- components so as to perform arithmetic stretch blit with two source images that are composited together and alpha blended with a destination image over time and therefore provide a gradual fade from one image to a second composite image see for example page 2 paragraph [0025].

As per claims 5 and 16 Taylor teaches an act of rotating the sub-component-oriented character on a background by making one or more function calls to the hardware graphics unit see for example page 5 paragraph [0096].

As per claims 7 and 18 Taylor teaches an act of rendering the sub-component-oriented character on the display device by making one or more function calls that are compatible with DirectX see for example page 7 paragraph [0126].

As per claims 9 and 19 Taylor teaches an act of processing the sub-component-oriented character to interface with the Application Program Interface see for example page 7 paragraph [0126].

As per claim 22 and in light of rejection of claims 1- 21 Stamm teaches a processing unit see for example in figure 2 blocks 21 and 49a, a display device see for example monitor 47; and scan conversion unit for over- scaled character representation see for example figure 5 block 90.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; US Patent 6,072,500, 5,651,104, 6,173,372, 6,535,220, 6,278,466, and 5,237,650.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is (703) 305-5658. The examiner can normally be reached on 6:30- 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (703) 308- 6829. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872- 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Mike Rahmjoo

January 30, 2004



MATTHEW C. BELLA  
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